Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001

Dean K. Matsuura
Manager
Regulatory Affairs

May 19, 2009

The Honorable Chairman and Members of
the Hawaii Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2008-0274 – Decoupling Proceeding
HECO Companies' Responses to PUC-IRs 33, 34, and 35

Enclosed for filing are the HECO Companies' remaining responses to the information requests ("IRs") prepared by the Commission's consultant, the National Regulatory Research Institute, and submitted to the Companies on April 30, 2009.[1] For reference purposes, the Companies have renumbered the twelve IRs as PUC-IRs 27 to 38, following in sequential order from the set of 26 IRs submitted by the Commission to the HECO Companies and the other Parties on March 5, 2009.

On May 18, 2009, the HECO Companies filed responses to PUC-IRs 27 to 32, and 36 to 38, and requested a one day extension to file responses to the remaining IRs. Enclosed for filing are the Companies' remaining responses to PUC-IRs 33, 34, and 35.

Very truly yours,

Enclosures

cc: Division of Consumer Advocacy
Hawaii Renewable Energy Alliance
Haiku Design and Analysis
Hawaii Holdings, LLC, dba First Wind Hawaii
Department of Business, Economic Development, and Tourism
Hawaii Solar Energy Association
Blue Planet Foundation

[1] The "HECO Companies" or "Companies" are Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Ltd.

PUC-IR-33

Please quantify the effect that the proposed RAM has on the HECO Companies' return on equity ("ROE")?

HECO Response:

It is not clear whether the IR requests estimates of the impact of a RAM on (1) the Companies' achieved rates of return on common equity, or (2) the cost of common equity (i.e., the return required by investors).

In order to estimate the impact of a RAM on the Companies' achieved rates of return on common equity, it is necessary to make assumptions as to the form of the RAM, the rate increases obtained as a result of the RAM, the timing of rate cases, and the rate of increases in costs (O&M expenses, depreciation and rate base items subject to the RAM).

In order to respond to the IR, the Companies have used the illustrative information provided in the response to PUC-IR-14, and the RAMs included in the Joint Decoupling Proposal. The information in PUC-IR-14 included proforma expenses, depreciation expenses and rate base for years 2009-2013 ("Five-Year Proforma"). As was explained in the HECO confidential response to CA-IR-268 (supplement 3/30/09) in HECO's pending rate case, Docket No. 2008-0083, HECO, like MECO and HELCO, prepared the 2010-2013 proforma statements primarily for general planning purposes, including to support the development of their financing and rate relief plans, but do not generally provide this information in its entirety to other departments, the Companies' management (other than executive management) or to external parties. The 2009 and 2010 Operations and Maintenance (O&M) expense estimates included as part of the Five-Year Proforma were developed by the Companies' individual departments in the Companies' budgeting process and do not reflect ratemaking adjustments or normalizations. The

Companies estimated the 2011-2013 O&M expense amounts by escalating the O&M expenses from the prior year by a fixed percentage. (In other words, the 2011-2013 amounts are simple trended estimates, and are not intended to be forecasts.) The illustrations incorporate a number of assumptions which impact the calculated ROE, including illustrative assumptions as to the timing of rate cases, the timing of rate relief resulting from the rate cases, and the allowed return on rate base.

Confidential Attachment 1 to PUC-IR-33 shows the calculated ROEs resulting from the application of the proposed RAM to the illustrative results of operations included in the response to PUC-IR-14. Confidential Attachment 1 to PUC-IR-34 shows the calculated ROE without the proposed RAM using the same the illustrative results of operations included in the response to PUC-IR-14 but with more frequent rate cases. Again, these are calculated ROEs, not a projection of what the ROE actually would be. It should be noted that the returns that the Companies have actually earned have been much lower than those used to establish rates in their recent rate cases. For example, the Commission set interim and final rates in HECO's 2005 test year rate case (Docket No. 04-0113) based on a 8.66% rate of return on rate base ("ROR") and a 10.7% rate of return on common equity ("ROE")[1] and set interim rates in HECO's 2007 test year rate case (Docket No. 2006-0386) based on a 8.62% ROR and 10.7% ROE.[2] HECO's actual rates of return on simple average rate base and on simple average common equity as filed with the Commission have been:

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[1] Interim D&O No. 22050 dated September 27, 2005; Amended Proposed D&O No. 23768 dated October 25, 2007; D&O No. 24171 dated May 1, 2008.
[2] Interim D&O No. 23749 dated October 22, 2007.

	Return on Rate Base	Return on Common Equity
2005	6.20%	6.92%
2006	6.78%	7.61%
2007	4.92%	4.52%
2008	7.05%	8.07%

The illustrative information provided in the response to PUC-IR-14 assumed that the next HECO rate case will use a 2011 test year, based on the assumption that a reasonable RAM would be implemented. Without such a mechanism, it appears that the HECO would need to file a 2010 test year rate case. HECO's revenue requirements in its 2009 test year rate case application were based on including the "full" cost of the Campbell Industrial Park ("CIP") Combustion Turbine Unit 1 ("CT-1") (as estimated at the time of the application). HECO also proposed an interim step increase that did not include the CIP CT-1 costs, and a later step increase for CIP CT-1 that proposed a step increase equal to the difference between the revenue requirement reflecting the full annualized cost of the CIP CT-1 (with the net investment of the CIP CT-1 in both the beginning and end of test year balances) and the revenue requirement exclusive of the cost of the CIP CT-1. HECO requested that the CIP CT-1 step increase become effective on the in-service date of the new unit, which is scheduled for July 31, 2009 (HECO-101, p. 4).[3] HECO further stated that, if the Commission does not approve the CIP CT-1 step increase, the interim increase (and effectively the final increase) should be based on the "base case" which includes the 2009 CIP CT-1 plant additions on an average basis (net of deferred income taxes) in the end of test year rate base balance but not in the beginning of test year rate base balance (HECO-101,

[3] HECO cited Commission precedent in proposing the CIP CT-1 step, as discussed in HECO T-1.

p. 3, footnote 2). The Consumer Advocate and the DOD opposed inclusion of the "full" cost of CIP CT-1 in revenue requirements, and proposed that a fully average test year be used.

Based on the joint decoupling proposal of the Companies and the Consumer Advocate in the decoupling docket, which incorporates a RAM rate base adjustment in 2010 that includes actual year-end 2009 plant balances (as well as conservatively estimated plant additions in 2010), HECO (as part of a settlement agreement with the Consumer Advocate and the Department of Defense filed May 15, 2009) has agreed to the use of the fully average test year, without a separate CIP CT-1 Step Increase or annualized ratemaking treatment of CIP CT-1 costs.

As Attachment 1 includes financial information for future years which is nonpublic information that should not be disclosed publicly as it might trigger requirements under the rules and guidelines of the Securities and Exchange Commission and/or the New York Stock Exchange that information that would be meaningful to investors be released to all investors, if the information is disclosed beyond a limited number of "insiders" (including persons required by agreement to maintain the confidentiality of the information and to use it only for proper purposes), it is being filed under the Protective Order issued on January 9, 2009 in this proceeding. If this attachment is not filed under the Protective Order in this proceeding, the disclosure of nonpublic financial information might trigger disclosure requirements under the rules and regulations of the Securities and Exchange Commission and/or the New York Stock Exchange.

The impact of a RAM on the cost of common equity also depends on a number of factors, including the form of the RAM, and the benefits (such as greater earnings stability) perceived by investors resulting from the RAM.

As noted in the HECO Companies' response in the decoupling docket, Docket No. 2008-0274, to the NRRI Scoping Paper, Appendix 2, Question 7: "If an appropriate decoupling mechanism (i.e., a mechanism that decouples sales from revenues and includes a fair revenue adjustment mechanism, or "RAM", to recover increased costs, as is contemplated by the HCEI Agreement), then the utility's revenues should be more stable than they would be without such a mechanism, and its earnings could be more stable. Taken in isolation, this would mean a lower level of investment risk than an entity with the same level of earnings, but more earnings variation, would have. However, the decoupling mechanism is being proposed in the context of the total commitments and requirements set forth in the HCEI Agreement – and is not being proposed in isolation. There is no indication that investors will perceive a lower level of investment risk as a result of the commitments and requirements in the HCEI Agreement taken altogether."

The HCEI Agreement[4] arises out of the Hawaii Clean Energy Initiative ("HCEI")[5], and documents a course of action to make Hawaii energy independent, while recognizing the need to maintain HECO's financial health in order to achieve that objective.

The HCEI Agreement commits HECO to facilitate the integration of substantial amounts of clean, renewable energy (wind energy in particular) into its grid and to enable electricity consumers to manage their electricity use more effectively. The agreement explicitly provides for the HCEI Parties to seek amendment to the Hawaii Renewable Portfolio Standards ("RPS")

[4] The *Energy Agreement among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies* ("Energy Agreement" or "HCEI Agreement") was executed on October 20, 2008. The signatories include the Governor of the State of Hawaii, the Department of Business, Economic Development and Tourism, the Consumer Advocate, HECO, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited. The agreement provides that the HCEI Parties will pursue a wide range of actions with the purpose of decreasing the State of Hawaii's dependence on imported fossil fuels through substantial increases in the use of renewable energy and implementation of new programs intended to secure greater energy efficiency and conservation.
[5] See HECO T-1, pages 48-49.

law (law which establishes renewable energy requirements for electric utilities that sell electricity for consumption in the State) to increase the current requirements from 20% to 25% by the year 2020, and to add a further RPS goal of 40% by the year 2030. The revised RPS law would also require that after 2014 the RPS goal be met solely with renewable energy generation versus including energy savings from energy efficiency measures. However, energy savings from energy efficiency measures would be counted toward the achievement of the overall HCEI 70% goal.

The HCEI Parties recognize that the move toward a more renewable and distributed and intermittent powered system will pose increased operating challenges to the utilities and that there is a need to assure that Hawaii preserves a stable electric grid to minimize disruption to service quality and reliability. They further recognize that Hawaii needs a system of utility regulation to transform the utilities from traditional sales-based companies to energy services companies while preserving financially sound utilities.

The commitment side of the HCEI Agreement is moving forward. The Legislature approved H.B. No. 1270, H.D. 1, S.D.2, which was signed into law (as Act 50) on May 6, 2009. The Legislature has passed H.B. No. 1464, H.D. 3, S.D. 2, C.D. 1, which, when signed into law by the Governor, will effectuate the change in the RPS law. Thus, there is no "without HCEI" scenario. If the regulatory transformation part of the HCEI Agreement (including decoupling) is not implemented, the business risk of the Company will substantially increase, and the utility's cost of common equity will be significantly higher.

The HECO Companies have not quantified the potential impact of the proposed RAM on their cost of common equity, as it is very difficult to isolate and quantify the impact of the factors that contribute to the investment risk (including the business risks and financial risks) for a given enterprise.

The Companies are not unique in this regard. For example, the fair rate of return for a utility, as set forth in Bluefield Water Works & Improvements Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923) and in Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944), should:

(1) Be commensurate with returns on investments in other enterprises having corresponding risks and uncertainties;

(2) Provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and

(3) Provide a return sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and capital-attracting ability.

To assess the fair rate of return, experts generally look at the market derived cost of common equity for the utility, or for comparable companies (taking into consideration relevant factors resulting in risk differentials between the utility and the comparable companies). The assessment of the difference in risk generally is based on judgment, rather than on a quantification of the individual factors contributing to the overall difference in risk.

		A	B	C	D	E	F	G	H	I	J	K	L
1	**Case with RAM - HECO Companies**												
2							Rate Case	RAM	Rate Case	RAM	RAM		
3		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Notes
	HECO:												
4	**Earnings**	$ 75,400	$ 69,544	$ 77,559	$ 57,153	$ 82,995	[redacted]					na	
5	**Authorized earnings per rate case plus RAM earnings**	$ 96,932	$ 97,131	$ 99,137	$ 100,650	$ 101,980						na	
6	**Earnings surplus or shortfall**	$ (21,532)	$ (27,587)	$ (21,578)	$ (43,497)	$ (18,985)						na	
7	**Estimate ROE**	8.49%	6.92%	7.61%	4.85%	8.07%						na	
	MECO:						Rate Case 2009	RAM 2010	RAM 2011	Rate Case 2012	RAM 2013	2014	
8	**Earnings**	$ 29,509	$ 27,005	$ 25,267	$ 21,392	$ 27,216	[redacted]					na	
9	**Authorized earnings per rate case plus RAM earnings**	$ 29,509	$ 29,042	$ 30,927	$ 33,770	$ 33,548						na	
10	**Earnings surplus or shortfall**	$ -	$ (2,037)	$ (5,660)	$ (12,378)	$ (6,332)						na	
11	**Estimate ROE**	10.45%	9.81%	9.51%	5.98%	8.54%						na	
	HELCO:						Rate Case 2009	RAM 2010	RAM 2011	RAM 2012	Rate Case 2013	2014	
12	**Earnings**	$ 21,329	$ 21,826	$ 16,946	$ 25,212	$ 26,648	[redacted]					na	
13	**Authorized earnings per rate case plus RAM earnings**	$ 26,880	$ 32,796	$ 31,545	$ 31,450	$ 30,767						na	
14	**Earnings surplus or shortfall**	$ (5,551)	$ (10,970)	$ (14,599)	$ (6,238)	$ (4,119)						na	
15	**Estimate ROE**	6.98%	6.86%	3.70%	8.17%	9.39%						na	

Notes

1. HECO's latest projection only extends to 2013.
2. HECO currently does not have projections identified separately for surcharge revenues recoverable via REIS. AMI is excluded from above.
3. HECO's decoupling implementation is projected to coincide with the HECO 2009 rate case intermi decision & order.
4. HECO is not proposing a revenue per customer decoupling mechanism.

5. MECO's latest projection only extends to 2013.
6. MECO currently does not have projections for surcharge revenues recoverable via REIS
7. MECO's decoupling implementation is projected to coincide with the MECO 2009 rate case intermi decision & order.
8. MECO is not proposing a revenue per customer decoupling mechanism.

9. HELCO's latest projection only extends to 2013.
10. HELCO currently does not have projections for surcharge revenues recoverable via REIS
11. HELCO's decoupling implementation is projected to coincide with the HELCO 2009 rate case intermi decision & order.
12. HELCO is not proposing a revenue per customer decoupling mechanism.

Confidential Information Deleted *Pursuant To Protective Order, Filed on* January 6, 2009.

PUC-IR-34

Please quantify the effect that decoupling without the RAM (revenue stability) has on the HECO Companies' ROE?

HECO Response:

It is not clear whether the IR requests estimates of the impact of a RAM on (1) the Companies' achieved rates of return on common equity, or (2) the cost of common equity (i.e., the return required by investors).

In order to respond to the IR, the Companies have used the illustrative information provided in the response to PUC-IR-14. As explained in response to PUC-IR-33, the information in PUC-IR-14 included proforma O&M expenses, depreciation expenses and rate base for years 2009-2013 ("Five-Year Proforma"). Also, as explained in the response to PUC-IR-33 and the HECO confidential response to CA-IR-268 (supplement 3/30/09) in HECO's pending rate case, Docket No. 2008-0083, HECO, like MECO and HELCO, prepared the 2010-2013 proforma statements primarily for general planning purposes, including to support the development of their financing and rate relief plans, but do not generally provide this information in its entirety to other departments, the Companies' management (other than executive management) or to external parties. The 2009 and 2010 Operations and Maintenance (O&M) expense estimates included as part of the Five-Year Proforma were developed by the Companies' individual departments in the Companies' budgeting process and do not reflect ratemaking adjustments or normalizations. The Companies estimated the 2011-2013 O&M expense amounts by escalating the O&M expenses from the prior year by a fixed percentage. (In other words, the 2011-2013 amounts are simple trended estimates, and are not intended to be forecasts.) The illustrations incorporate a number of assumptions which impact the calculated

ROE, including illustrative assumptions as to the timing of rate cases, the timing of rate relief resulting from the rate cases, and the allowed return on rate base.

Confidential Attachment 1 to PUC-IR-33 shows the calculated ROE resulting from the application of the proposed RAM to the illustrative results of operations included in the response to PUC-IR-14. Confidential Attachment 1 to PUC-IR-34 shows the calculated ROE without the proposed RAM using the same illustrative results of operations included in the response to PUC-IR-14, but with more frequent rate cases. Again, these are calculated ROEs, not a projection of what the ROE actually would be. It should be noted that the returns that the Companies have actually earned have been much lower than those used to establish rates in their recent rate cases. For example, the Commission set interim and final rates in HECO's 2005 test year rate case (Docket No. 04-0113) based on a 8.66% rate of return on rate base ("ROR") and a 10.7% rate of return on common equity ("ROE")[1] and set interim rates in HECO's 2007 test year rate case (Docket No. 2006-0386) based on a 8.62% ROR and 10.7% ROE.[2] HECO's actual rates of return on simple average rate base and on simple average common equity as filed with the Commission have been:

	Return on Rate Base	Return on Common Equity
2005	6.20%	6.92%
2006	6.78%	7.61%
2007	4.92%	4.52%
2008	7.05%	8.07%

[1] Interim D&O No. 22050 dated September 27, 2005; Amended Proposed D&O No. 23768 dated October 25, 2007; D&O No. 24171 dated May 1, 2008.
[2] Interim D&O No. 23749 dated October 22, 2007.

The illustrative information provided in the response to PUC-IR-14, Attachment 1, Sheet 1-HECO, assumed that the next HECO rate case will use a 2011 test year, based on the assumption that a reasonable RAM would be implemented. Without such a mechanism, it appears that the HECO would need to file a 2010 test year rate case (see response to PUC-IR-14, Attachment 1, Sheet 2-HECO). HECO's revenue requirements in its 2009 test year rate case application were based on including the "full" cost of the Campbell Industrial Park ("CIP") Combustion Turbine Unit 1 ("CT-1") (as estimated at the time of the application). HECO also proposed an interim step increase that did not include the CIP CT-1 costs, and a later step increase for CIP CT-1 that proposed a step increase equal to the difference between the revenue requirement reflecting the full annualized cost of the CIP CT-1 (with the net investment of the CIP CT-1 in both the beginning and end of test year balances) and the revenue requirement exclusive of the cost of the CIP CT-1. HECO requested that the CIP CT-1 step increase become effective on the in-service date of the new unit, which is scheduled for July 31, 2009 (HECO-101, p. 4).[3] HECO further stated that, if the Commission does not approve the CIP CT-1 step increase, the interim increase (and effectively the final increase) should be based on the "base case" which includes the 2009 CIP CT-1 plant additions on an average basis (net of deferred income taxes) in the end of test year rate base balance but not in the beginning of test year rate base balance (HECO-101, p. 3, footnote 2). The Consumer Advocate and the DOD opposed inclusion of the "full" cost of CIP CT-1 in revenue requirements, and proposed that a fully average test year be used.

As described in response to PUC-IR-33, based on the joint decoupling proposal of the Companies and the Consumer Advocate in the decoupling docket, which incorporates a RAM

[3] HECO cited Commission precedent in proposing the CIP CT-1 step, as discussed in HECO T-1.

rate base adjustment in 2010 that includes actual year-end 2009 plant balances (as well as conservatively estimated plant additions in 2010), HECO (as part of a settlement agreement with the Consumer Advocate and the Department of Defense filed May 15, 2009) has agreed to the use of the fully average test year, without a separate CIP CT-1 Step Increase or annualized ratemaking treatment of CIP CT-1 costs.

As this attachment includes financial information for future years which is nonpublic information that should not be disclosed publicly as it might trigger requirements under the rules and guidelines of the Securities and Exchange Commission and/or the New York Stock Exchange that information that would be meaningful to investors be released to all investors, if the information is disclosed beyond a limited number of "insiders" (including persons required by agreement to maintain the confidentiality of the information and to use it only for proper purposes), it is being filed under the Protective Order issued on January 9, 2009 in this proceeding. If this attachment is not filed under the Protective Order in this proceeding, the disclosure of nonpublic financial information might trigger disclosure requirements under the rules and regulations of the Securities and Exchange Commission and/or the New York Stock Exchange.

As noted in the HECO Companies' response in the decoupling docket, Docket No. 2008-0274, to the NRRI Scoping Paper, Appendix 2, Question 7: "If an appropriate decoupling mechanism (i.e., a mechanism that decouples sales from revenues and includes a fair revenue adjustment mechanism, or "RAM", to recover increased costs, as is contemplated by the HCEI Agreement), then the utility's <u>revenues</u> should be more stable than they would be without such a mechanism, and its <u>earnings</u> could be more stable. Taken in isolation, this would mean a lower level of investment risk than an entity with the same level of earnings, but more earnings variation, would have. However, the decoupling mechanism is being proposed in the context of the total commitments and requirements set forth in the HCEI Agreement – and is not being proposed in isolation. There is no indication that investors will perceive a lower level of investment risk as a result of the commitments and requirements in the HCEI Agreement taken altogether."

The HCEI Agreement[4] arises out of the Hawaii Clean Energy Initiative ("HCEI")[5], and documents a course of action to make Hawaii energy independent, while recognizing the need to maintain HECO's financial health in order to achieve that objective.

The HCEI Agreement commits HECO to facilitate the integration of substantial amounts of clean, renewable energy (wind energy in particular) into its grid and to enable electricity consumers to manage their electricity use more effectively. The agreement explicitly provides for the HCEI Parties to seek amendment to the Hawaii Renewable Portfolio Standards ("RPS") law (law which establishes renewable energy requirements for electric utilities that sell electricity for consumption in the State) to increase the current requirements from 20% to 25% by the year 2020, and to add a further RPS goal of 40% by the year 2030. The revised RPS law would also require that after 2014 the RPS goal be met solely with renewable energy generation versus including energy savings from energy efficiency measures. However, energy savings from energy efficiency measures would be counted toward the achievement of the overall HCEI 70% goal.

[4] The *Energy Agreement among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies* ("Energy Agreement" or "HCEI Agreement") was executed on October 20, 2008. The signatories include the Governor of the State of Hawaii, the Department of Business, Economic Development and Tourism, the Consumer Advocate, HECO, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited. The agreement provides that the HCEI Parties will pursue a wide range of actions with the purpose of decreasing the State of Hawaii's dependence on imported fossil fuels through substantial increases in the use of renewable energy and implementation of new programs intended to secure greater energy efficiency and conservation.

[5] See HECO T-1, pages 48-49.

The HCEI Parties recognize that the move toward a more renewable and distributed and intermittent powered system will pose increased operating challenges to the utilities and that there is a need to assure that Hawaii preserves a stable electric grid to minimize disruption to service quality and reliability. They further recognize that Hawaii needs a system of utility regulation to transform the utilities from traditional sales-based companies to energy services companies while preserving financially sound utilities.

The commitment side of the HCEI Agreement is moving forward. The Legislature approved H.B. No. 1270, H.D. 1, S.D.2, which was signed into law (as Act 50) on May 6, 2009. The Legislature has passed H.B. No. 1464, H.D. 3, S.D. 2, C.D. 1, which, when signed into law by the Governor, will effectuate the change in the RPS law. Thus, there is no "without HCEI" scenario. If the regulatory transformation part of the HCEI Agreement (including decoupling) is not implemented, the business risk of the Company will substantially increase, and the utility's cost of common equity will be significantly higher.

The HECO Companies have not quantified the potential impact of the proposed RAM on their cost of common equity, as it is very difficult to isolate and quantify the impact of the factors that contribute to the investment risk (including the business risks and financial risks) for a given enterprise.

The HECO Companies are not unique in this regard. For example, the fair rate of return for a utility, as set forth in Bluefield Water Works & Improvements Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923) and in Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944), should:

(1) Be commensurate with returns on investments in other enterprises having corresponding risks and uncertainties;

(2) Provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and

(3) Provide a return sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and capital-attracting ability.

To assess the fair rate of return, experts generally look at the market derived cost of common equity for the utility, or for comparable companies (taking into consideration relevant factors resulting in risk differentials between the utility and the comparable companies). The assessment of the difference in risk generally is based on judgment, rather than on a quantification of the individual factors contributing to the overall difference in risk.

1	**Case without RAM - HECO Companies**	A	B	C	D	E	F	G	H	I	J	K	L
2							Rate Case	Rate Case		Rate Case			
3		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Notes
	HECO:												
4	Earnings	$ 75,400	$ 69,544	$ 77,559	$ 57,153	$ 82,995	[redacted]					na	
5	Authorized earnings per rate case	$ 96,932	$ 97,131	$ 99,137	$ 100,650	$ 101,980						na	
6	Earnings surplus or shortfall	$ (21,532)	$ (27,587)	$ (21,578)	$ (43,497)	$ (18,985)						na	
7	Estimate ROE	8.49%	6.92%	7.61%	4.85%	8.07%						na	
	MECO:						Rate Case 2009	2010	Rate Case 2011	2012	Rate Case 2013	2014	
8	Earnings	$ 29,509	$ 27,005	$ 25,267	$ 21,392	$ 27,216	[redacted]					na	
9	Authorized earnings per rate case	$ 29,509	$ 29,042	$ 30,927	$ 33,770	$ 33,548						na	
10	Earnings surplus or shortfall	$ -	$ (2,037)	$ (5,660)	$ (12,378)	$ (6,332)						na	
11	Estimate ROE	10.45%	9.81%	9.51%	5.98%	8.54%						na	
	HELCO:						Rate Case 2009	2010	Rate Case 2011	2012	Rate Case 2013	2014	
12	Earnings	$ 21,329	$ 21,826	$ 16,946	$ 25,212	$ 26,648	[redacted]					na	
13	Authorized earnings per rate case	$ 26,880	$ 32,796	$ 31,545	$ 31,450	$ 30,767						na	
14	Earnings surplus or shortfall	$ (5,551)	$ (10,970)	$ (14,599)	$ (6,238)	$ (4,119)						na	
15	Estimate ROE	6.98%	6.86%	3.70%	8.17%	9.39%						na	

Notes

1. HECO's latest projection only extends to 2013.
2. HECO currently does not have projections identified separately for surcharge revenues recoverable via REIS. AMI is excluded from above.
3. HECO's decoupling implementation is projected to coincide with the HECO 2009 rate case intermi decision & order.
4. HECO is not proposing a revenue per customer decoupling mechanism.

5. MECO's latest projection only extends to 2013.
6. MECO currently does not have projections for surcharge revenues recoverable via REIS
7. MECO's decoupling implementation is projected to coincide with the MECO 2009 rate case intermi decision & order.
8. MECO is not proposing a revenue per customer decoupling mechanism.

9. HELCO's latest projection only extends to 2013.
10. HELCO currently does not have projections for surcharge revenues recoverable via REIS
11. HELCO's decoupling implementation is projected to coincide with the HELCO 2009 rate case intermi decision & order.
12. HELCO is not proposing a revenue per customer decoupling mechanism.

Confidential Information Deleted Pursuant To Protective Order, Filed on January 6, 2009.

PUC-IR-35

Please quantify the effect that a revenue per customer decoupling RAM has on the HECO Companies' ROE?

HECO Response:

It is not clear whether the IR requests estimates of the impact of a RAM on (1) the Companies' achieved rates of return on common equity, or (2) the cost of common equity (i.e., the return required by investors).

In order to respond to the IR, the Companies have used the illustrative information provided in the response to PUC-IR-27, part f, which requested that the Companies provide the responses to rows 35 to 41 in the spreadsheets developed by the Commission and completed as the Companies' response to PUC-IR-14. The information in PUC-IR-27, part f, similar to information provided in response to PUC-IR-14 and described earlier, included proforma O&M expenses, depreciation expenses and rate base for years 2009-2013 ("Five-Year Proforma"). As was explained in the responses to PUC-IR-33 and PUC-IR-34 and the HECO confidential response to CA-IR-268 (supplement 3/30/09) in HECO's pending rate case, Docket No. 2008-0083, HECO, like MECO and HELCO, prepared the 2010-2013 proforma statements primarily for general planning purposes, including to support the development of their financing and rate relief plans, but do not generally provide this information in its entirety to other departments, the Companies' management (other than executive management) or to external parties. The 2009 and 2010 Operations and Maintenance (O&M) expense estimates included as part of the Five-Year Proforma were developed by the Companies' individual departments in the Companies' budgeting process and do not reflect ratemaking adjustments or normalizations. The Companies estimated the 2011-2013 O&M expense amounts by escalating the O&M expenses from the prior year by a fixed percentage. (In other words, the 2011-2013 amounts are simple trended estimates, and are not intended to be forecasts.) The illustrations incorporate a number of assumptions which impact the calculated ROE, including illustrative assumptions as to the timing of rate cases, the timing of rate relief resulting from the rate cases, and the allowed return on rate base.

Confidential Attachment 1 shows the calculated ROE resulting from the application of revenue/customer decoupling, with and without RAM, based on the illustrative earnings included in the response to PUC-IR-27, part f. Again, these are calculated ROEs, not a projection of what the ROE actually would be.

It should be noted that the returns that the Companies have actually earned have been much lower than those used to establish rates in their recent rate cases. For example, the Commission set interim and final rates in HECO's 2005 test year rate case (Docket No. 04-0113) based on a 8.66% rate of return on rate base ("ROR") and a 10.7% rate of return on common equity ("ROE")[1] and set interim rates in HECO's 2007 test year rate case (Docket No. 2006-0386) based on a 8.62% ROR and 10.7% ROE.[2] HECO's actual rates of return on simple average rate base and on simple average common equity as filed with the Commission have been:

	Return on Rate Base	Return on Common Equity
2005	6.20%	6.92%
2006	6.78%	7.61%
2007	4.92%	4.52%
2008	7.05%	8.07%

[1] Interim D&O No. 22050 dated September 27, 2005; Amended Proposed D&O No. 23768 dated October 25, 2007; D&O No. 24171 dated May 1, 2008.
[2] Interim D&O No. 23749 dated October 22, 2007.

The illustrative information provided in the response to PUC-IR-14, Attachment 1, Sheet 1-HECO assumed that the next HECO rate case will use a 2011 test year, based on the assumption that a reasonable RAM would be implemented. Without such a mechanism, it appears that the HECO would need to file a 2010 test year rate case (see response to PUC-IR-14, Attachment 1, Sheet 2-HECO). HECO's revenue requirements in its 2009 test year rate case application were based on including the "full" cost of the Campbell Industrial Park ("CIP") Combustion Turbine Unit 1 ("CT-1") (as estimated at the time of the application). HECO also proposed an interim step increase that did not include the CIP CT-1 costs, and a later step increase for CIP CT-1 that proposed a step increase equal to the difference between the revenue requirement reflecting the full annualized cost of the CIP CT-1 (with the net investment of the CIP CT-1 in both the beginning and end of test year balances) and the revenue requirement exclusive of the cost of the CIP CT-1. HECO requested that the CIP CT-1 step increase become effective on the in-service date of the new unit, which is scheduled for July 31, 2009 (HECO-101, p. 4).[3] HECO further stated that, if the Commission does not approve the CIP CT-1 step increase, the interim increase (and effectively the final increase) should be based on the "base case" which includes the 2009 CIP CT-1 plant additions on an average basis (net of deferred income taxes) in the end of test year rate base balance but not in the beginning of test year rate base balance (HECO-101, p. 3, footnote 2). The Consumer Advocate and the DOD opposed inclusion of the "full" cost of CIP CT-1 in revenue requirements, and proposed that a fully average test year be used.

[3] HECO cited Commission precedent in proposing the CIP CT-1 step, as discussed in HECO T-1.

As described in the responses to PUC-IR-33 and PUC-IR-34, based on the joint decoupling proposal of the Companies and the Consumer Advocate in the decoupling docket, which incorporates a RAM rate base adjustment in 2010 that includes actual year-end 2009 plant balances (as well as conservatively estimated plant additions in 2010), HECO (as part of a settlement agreement with the Consumer Advocate and the Department of Defense filed May 15, 2009) has agreed to the use of the fully average test year, without a separate CIP CT-1 Step Increase or annualized ratemaking treatment of CIP CT-1 costs.

As Attachment 1 includes financial information for future years and Attachment 2 of this response is provided to compare the projected customer growth of the HECO Companies with historic and projected industry cost trends. Attachment 2 shows that although industry cost growth is projected to be much lower in the future than what has been experienced in the past, it is anticipated to continue to outpace customer growth significantly going forward. Both attachments contain nonpublic information that should not be disclosed publicly as it might trigger requirements under the rules and guidelines of the Securities and Exchange Commission and/or the New York Stock Exchange that information that would be meaningful to investors be released to all investors, if the information is disclosed beyond a limited number of "insiders" (including persons required by agreement to maintain the confidentiality of the information and to use it only for proper purposes), it is being filed under the Protective Order issued on January 9, 2009 in this proceeding. If this attachment is not filed under the Protective Order in this proceeding, the disclosure of nonpublic financial information might trigger disclosure requirements under the rules and regulations of the Securities and Exchange Commission and/or the New York Stock Exchange.

Like the impact of a RAM, the impact on a revenue/customer decoupling on the cost of common equity also depends on a number of factors, including the form of the revenue/customer proposal, and the benefits (such as greater earnings stability) perceived by investors resulting from the revenue/customer decoupling. As noted in the HECO Companies' response in the decoupling docket, Docket No. 2008-0274, to the NRRI Scoping Paper, Appendix 2, Question 7: "If an appropriate decoupling mechanism (i.e., a mechanism that decouples sales from revenues and includes a fair revenue adjustment mechanism, or "RAM", to recover increased costs, as is contemplated by the HCEI Agreement), then the utility's <u>revenues</u> should be more stable than they would be without such a mechanism, and its <u>earnings</u> could be more stable. Taken in isolation, this would mean a lower level of investment risk than an entity with the same level of earnings, but more earnings variation, would have. However, the decoupling mechanism is being proposed in the context of the total commitments and requirements set forth in the HCEI Agreement – and is not being proposed in isolation. There is no indication that investors will perceive a lower level of investment risk as a result of the commitments and requirements in the HCEI Agreement taken altogether."

The HCEI Agreement[4] arises out of the Hawaii Clean Energy Initiative ("HCEI")[5], and documents a course of action to make Hawaii energy independent, while recognizing the need to maintain HECO's financial health in order to achieve that objective.

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[4] The *Energy Agreement among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies* ("Energy Agreement" or "HCEI Agreement") was executed on October 20, 2008. The signatories include the Governor of the State of Hawaii, the Department of Business, Economic Development and Tourism, the Consumer Advocate, HECO, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited. The agreement provides that the HCEI Parties will pursue a wide range of actions with the purpose of decreasing the State of Hawaii's dependence on imported fossil fuels through substantial increases in the use of renewable energy and implementation of new programs intended to secure greater energy efficiency and conservation.

[5] See HECO T-1, pages 48-49.

The HCEI Agreement commits HECO to facilitate the integration of substantial amounts of clean, renewable energy (wind energy in particular) into its grid and to enable electricity consumers to manage their electricity use more effectively. The agreement explicitly provides for the HCEI Parties to seek amendment to the Hawaii Renewable Portfolio Standards ("RPS") law (law which establishes renewable energy requirements for electric utilities that sell electricity for consumption in the State) to increase the current requirements from 20% to 25% by the year 2020, and to add a further RPS goal of 40% by the year 2030. The revised RPS law would also require that after 2014 the RPS goal be met solely with renewable energy generation versus including energy savings from energy efficiency measures. However, energy savings from energy efficiency measures would be counted toward the achievement of the overall HCEI 70% goal.

The HCEI Parties recognize that the move toward a more renewable and distributed and intermittent powered system will pose increased operating challenges to the utilities and that there is a need to assure that Hawaii preserves a stable electric grid to minimize disruption to service quality and reliability. They further recognize that Hawaii needs a system of utility regulation to transform the utilities from traditional sales-based companies to energy services companies while preserving financially sound utilities.

The commitment side of the HCEI Agreement is moving forward. The Legislature approved H.B. No. 1270, H.D. 1, S.D.2, which was signed into law (as Act 50) on May 6, 2009. The Legislature has passed H.B. No. 1464, H.D. 3, S.D. 2, C.D. 1, which, when signed into law by the Governor, will effectuate the change in the RPS law. Thus, there is no "without HCEI" scenario. If the regulatory transformation part of the HCEI Agreement (including decoupling) is not implemented, the business risk of the Company will substantially increase, and the utility's cost of common equity will be significantly higher.

The Hawaiian Electric Companies have not quantified the potential impact of the proposed RAM on their cost of common equity, as it is very difficult to isolate and quantify the impact of the factors that contribute to the investment risk (including the business risks and financial risks) for a given enterprise.

The Hawaiian Electric Utilities are not unique in this regard. For example, the fair rate of return for a utility, as set forth in Bluefield Water Works & Improvements Co. v. Public Service Commission of West Virginia (262 U.S. 679, 1923) and in Federal Power Commission v. Hope Natural Gas Company (320 U.S. 391, 1944), should:

(1) Be commensurate with returns on investments in other enterprises having corresponding risks and uncertainties;

(2) Provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and

(3) Provide a return sufficient to assure confidence in the financial integrity of the enterprise so as to maintain its credit and capital-attracting ability.

To assess the fair rate of return, experts generally look at the market derived cost of common equity for the utility, or for comparable companies (taking into consideration relevant factors resulting in risk differentials between the utility and the comparable companies). The assessment of the difference in risk generally is based on judgment, rather than on a quantification of the individual factors contributing to the overall difference in risk.

		A	B	C	D	E	F	G	H	I	J	K	L
1	**Case with Revenue/Customer, With RAM - HECO Companies**	A	B	C	D	E	F	G	H	I	J	K	L
2							Rate Case	RAM	Rate Case	RAM	RAM		
3		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Notes
	HECO:												
4	Change in revenue with revenue/customer decoupling	$ 75,400	$ 69,544	$ 77,559	$ 57,153	$ 82,995	[redacted]					na	
5	Earnings with revenue/customer decoupling	$ 96,932	$ 97,131	$ 99,137	$ 100,650	$ 101,980	[redacted]					na	
6	Earnings including revenue/customer decoupling surplus or shortfall	$ (21,532)	$ (27,587)	$ (21,578)	$ (43,497)	$ (18,985)	[redacted]					na	
7	Estimate ROE	8.49%	6.92%	7.61%	4.85%	8.07%	[redacted]					na	
	MECO:						Rate Case 2009	RAM 2010	RAM 2011	Rate Case 2012	RAM 2013	2014	
8	Change in revenue with revenue/customer decoupling	$ 29,509	$ 27,005	$ 25,267	$ 21,392	$ 27,216	[redacted]					na	
9	Earnings with revenue/customer decoupling	$ 29,509	$ 29,042	$ 30,927	$ 33,770	$ 33,548	[redacted]					na	
10	Earnings including revenue/customer decoupling surplus or shortfall	$ -	$ (2,037)	$ (5,660)	$ (12,378)	$ (6,332)	[redacted]					na	
11	Estimate ROE	10.45%	9.81%	9.51%	5.98%	8.54%	[redacted]					na	
	HELCO:						Rate Case 2009	RAM 2010	RAM 2011	RAM 2012	Rate Case 2013	2014	
12	Change in revenue with revenue/customer decoupling	$ 21,329	$ 21,826	$ 16,946	$ 25,212	$ 26,648	[redacted]					na	
13	Earnings with revenue/customer decoupling	$ 26,880	$ 32,796	$ 31,545	$ 31,450	$ 30,767	[redacted]					na	
14	Earnings including revenue/customer decoupling surplus or shortfall	$ (5,551)	$ (10,970)	$ (14,599)	$ (6,238)	$ (4,119)	[redacted]					na	
15	Estimate ROE	6.98%	6.86%	3.70%	8.17%	9.39%	[redacted]					na	

Notes

1. HECO's latest projection only extends to 2013.
2. HECO currently does not have projections identified separately for surcharge revenues recoverable via REIS. AMI is excluded from above.
3. HECO's decoupling implementation is projected to coincide with the HECO 2009 rate case intermi decision & order.
4. HECO is not proposing a revenue per customer decoupling mechanism.

5. MECO's latest projection only extends to 2013.
6. MECO currently does not have projections for surcharge revenues recoverable via REIS
7. MECO's decoupling implementation is projected to coincide with the MECO 2009 rate case intermi decision & order.
8. MECO is not proposing a revenue per customer decoupling mechanism.

9. HELCO's latest projection only extends to 2013.
10. HELCO currently does not have projections for surcharge revenues recoverable via REIS
11. HELCO's decoupling implementation is projected to coincide with the HELCO 2009 rate case intermi decision & order.
12. HELCO is not proposing a revenue per customer decoupling mechanism.

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	Case with Revenue/Customer, without RAM - HECO Companies	A	B	C	D	E	F	G	H	I	J	K	L
2							Rate Case	Rate Case		Rate Case			
3		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Notes
	HECO:												
4	Change in revenue with revenue/customer decoupling	$ 75,400	$ 69,544	$ 77,559	$ 57,153	$ 82,995	[redacted]					na	
5	Earnings with revenue/customer decoupling	$ 96,932	$ 97,131	$ 99,137	$ 100,650	$ 101,980	[redacted]					na	
6	Earnings including revenue/customer decoupling surplus or shortfall	$ (21,532)	$ (27,587)	$ (21,578)	$ (43,497)	$ (18,985)	[redacted]					na	
7	Estimate ROE	8.49%	6.92%	7.61%	4.85%	8.07%	[redacted]					na	
	MECO:						Rate Case 2009	2010	Rate Case 2011	2012	Rate Case 2013	2014	
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Notes

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4. HECO is not proposing a revenue per customer decoupling mechanism.

5. MECO's latest projection only extends to 2013.
6. MECO currently does not have projections for surcharge revenues recoverable via REIS
7. MECO's decoupling implementation is projected to coincide with the MECO 2009 rate case intermi decision & order.
8. MECO is not proposing a revenue per customer decoupling mechanism.

9. HELCO's latest projection only extends to 2013.
10. HELCO currently does not have projections for surcharge revenues recoverable via REIS
11. HELCO's decoupling implementation is projected to coincide with the HELCO 2009 rate case intermi decision & order.
12. HELCO is not proposing a revenue per customer decoupling mechanism.

REVENUE PER CUSTOMER METHODOLOGY ANALYSIS

	HECO			MECO			HELCO		
YEAR	No. of Customers	Cust GR	Cost Growth	No. of Customers	Cust GR	Cost Growth	No. of Customers	Cust GR	Cost Growth
2004	287	NA	NA	62	NA	NA	70	NA	NA
2005	290	1.05%	7.74%	63	1.61%	7.74%	73	4.29%	7.74%
2006	293	1.03%	6.74%	64	1.59%	6.74%	75	2.74%	6.74%
2007	294	0.34%	3.28%	66	3.13%	3.28%	78	4.00%	3.28%
2008	294	0.00%	6.52%	67	1.52%	6.52%	79	1.28%	6.52%
2009	[redacted]			[redacted]			[redacted]		
2010									
2011									
2012									
2013									

"No. of Customers" projection from line 11 from Companies' response to PUC-IR-14.

"Cost Growth" for years 2005 through 2009 from Bureau of Labor Statistics, Producer Price Index Industry Data. Series Id: PCU2211--2211, Industry Electric Power generation, transmission and distribution, Product: Electric power generation, transmission and distribtuion, Base Date: 200313, website: http://data.bls.gove/PDQ/servlet/SurveyOutputServlet, 5/17/2009

"Cost Growth" for years 2009 through 2013 from Global Insight Power Planner Forecast Appendix, Table A21, Summary Operations and Maintenance Costs: Combined Materials and Services", Electric Expenses, Third Quarter 2008

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